From: Allen, Elizabeth
To: POULSEN Mike
Subject: RE: Portland Harbor HexaCDF risk
Date: Thursday, August 20, 2015 6:47:00 AM
Attachments: Arkema.xlsx

I apparently attached the file before I'd saved everything!

From: Allen, Elizabeth
Sent: Thursday, August 20, 2015 6:44 AM
To: 'POULSEN Mike'
Subject: RE: Portland Harbor HexaCDF risk

Here's some of the printouts from the R code of ROA 2 (fish consumption) for cancer and infant non-cancer. I've extracted RM 6 through 8. As you can see, the cancer risk is really high as well (0.3, and I'm sure they didn't use the exponential equation on that), but since It's cumulative risk, I can't tell what's driving that value, even though we both now it's the dioxins/furans. The site-wide "average" for the west side using this technique is 4E-3. So just averaging along that side of the river shows what site-wide averaging can do to dilute out such a contaminated site. Another problem is that eth dioxin/furan data are crap (didn't Kristine say it was shit in that call with Bob one day?). Density is poor, so that one detection of HxCDF has a lot of influence, because there aren't a lot of other results for the algorithm to drag into the calcs…

From: POULSEN Mike [mailto:POULSEN.Mike@deq.state.or.us]
Sent: Wednesday, August 19, 2015 1:46 PM
To: Allen, Elizabeth
Subject: Portland Harbor HexaCDF risk

Elizabeth –

We talked briefly on Monday and you mentioned the very high HexaCDF sediment to fish HQ of 1,200,000 at Arkema. I was in training yesterday, but now that I've thought about it some more, I still don't quite buy it. The sitewide infant HQ from fish ingestion is 7 for dioxin TEQ (HHRA Table 5-76). The sitewide sediment concentration for dioxin TEQ is 660 pg/g (Table 5-24). Essentially all of the dioxin concentration comes from RM7W with an EPC of 14,000 pg/g. Perhaps there is something going on with greater uptake of HexaCDF, or something else, but I don't see how a localized RM concentration 21 times the sitewide average would increase the HQ from 7 sitewide to 1,200,000 at RM7W. Also, what does that make the RM7W cancer risk from HexaCDF? It seems like it should be pushing 1. I guess I'm suggesting that you take a close look at the evaluation to make sure that an error didn't sneak in somewhere.

- Mike